

2406000102020601-S
(SUPPLEMENTARY EXAM) FEBRUARY-2025
SECOND MBBS
PATHOLOGY (PAPER - I) (NEW) (OMR)

[Time: As Per Schedule]

[Max. Marks:100]

Instructions:

1. Fill up strictly the following details on your answer book

- a. Name of the Examination: **SECOND MBBS**
- b. Name of the Subject: **PATHOLOGY (PAPER - I) (NEW) (OMR)**
- c. Subject Code No: **2406000102020601-S**

- 2. Sketch neat and labelled diagram wherever necessary.
- 3. Figures to the right indicate full marks of the question.
- 4. All questions are compulsory.

Seat No:

--	--	--	--	--	--

Student's Signature

SECTION -I

Q.1 Multiple choice questions (*no negative markings)

20

Each Question Carries One mark.

- 1. All infarcts are usually:
 - A. Wedge shaped.
 - B. Square shaped
 - C. Rectangular shaped
 - D. Circular in shape
- 2. Most common opportunistic lung infection in AIDS patient is
 - A. Pneumocystis carinii
 - B. Kaposi sarcoma
 - C. candidiasis
 - D. Histoplasmosis.
- 3. IgE mediated allergy / Asthma is example of which hypersensitivity reaction
 - A. Type-I
 - B. Type-II

- #### D. Type-IV.

4. The most common route of spread of infection to the brain is:

A. Via venous route

B. Via arterial route

C. Via lymphatics

D. Along nerves

5. Test useful for detection of HIV during window period:

A. ELISA

B. Western blot

C. CD4+ cell count

D. p24 antigen capture assay

6. Dystrophic calcification in Spleen is seen in which disease.

A. Sickle cell disease

B. Left Heart Failure

C. Fatty Liver

D. ARDS.

7. Diabetic foot is an example of:

A. Dry gangrene

B. Wet gangrene

C. Gas gangrene

D. Necrotising inflammation

8. Interstitial fluid collection during Congestive cardiac failure is called

A. Cystic collection

B. Exudate

C. Edema

D. Effusion.

9. Haematoxylin stains:

A. Nuclear chromatin material

B. RNA

C. Cytosolic components

D. Cell membrane components.

10. Most Important Antigen initiating graft rejection.

A. P24 Ag

B. polysaccharide

C. HLA antigen

D. TCR.

11. Type of Necrosis in pancreatitis:

A. Fat

B. Fibrinoid

C. Caseus

D. Coagulative

12. Which of the following is an Apoptosis inhibitor gene?

A. BCL-2

B. Rb

C. P53

D. C-Myc

13. Out of various free radical species, the following radical is most reactive:

A. Superoxide ($O_2^{\cdot -}$)B. Hydrogen peroxide (H_2O_2)C. Hydroxyl ($OH^{\cdot -}$)

D. Nitric oxide (NO)

14. Correct sequence of Cell cycle is

A. G_0 -M-G2-S- G_1 B. G_0 - G_1 -G2-S-MC. G_0 - G_1 -S-G2-MD. G_0 - G_1 -S-M-G2

15. For karyotyping, the dividing cells are arrested by Addition of colchicine in the following mitotic phase:

A. Prophase

B. Metaphase

C. Anaphase

D. Telophase

16. For Electron Microscopy Histopathology specimen are fixed in

A. Glutaraldehyde

B. 10% Ethyl alcohol

C. 10% picric acid

D. 10% buffered neutral formalin

17. Enzyme which prevents ageing is:

A. Catalase

B. Superoxide dismutase

C. Metalloproteinase

D. Telomerase

18. Bombay Blood group person have following ABO Blood group

A. "A" group

B. "B" group

C. "O" group

D. "H" group

19. Basement membrane consists of:

- | | |
|----------------------|---------------------|
| A. Type I collagen | B. Type II collagen |
| C. Type III collagen | D. Type IV collagen |

20. All are autosomal dominant inherited cancer syndromes except:

- | | |
|-------------------|--------------------------|
| A. Retinoblastoma | B. Xeroderma pigmentosum |
| C. HNPCC | D. Neurofibromatosis. |

SECTION -II

Q.2 Case based long essay questions

[13*1=13]

A 40-year-old male who had a history of road traffic accident presented to the clinic with polytrauma and left thigh swelling.

Patient was not able to walk.

His x-ray showed comminuted displaced fracture of the shaft femur. After 2 days he developed sudden shortness of breath, confusion, and vomiting, He also developed petechial rashes

Lab findings - microscopic examination of urine showed fat globules.

- | | |
|--|----|
| 1) What is your diagnosis based on the above clinical finding and lab investigation? | 02 |
| 2) Describe aetiology and pathogenesis of given condition | 02 |
| 3) Write consequences of given condition | 04 |
| 4) Describe difference between Arterial thrombi and Venous thrombi | 05 |

Q.3 Long essay questions. (Attempt any three)

9*3=27

- | | |
|--|---------|
| 1) Define oedema. Discuss pathophysiology of oedema. Add a note on pulmonary oedema. | [4+3+2] |
|--|---------|

- 2) Define Hypersensitivity reactions. Describe etiology, pathogenesis, and examples of Type- 4 Hypersensitivity reactions. [1+2+4+2]
- 3) Define Inflammation. Write in detail about vascular and cellular changes in inflammation. [4+3+2]
- 4) Describe etiology of Cell injury. Describe morphology of Cell injury. [3+6]

SECTION-III

Q.4 Short notes (Attempt Any 8)

[8*5=40]

- 1) Three opportunistic infections and two neoplasms associated with AIDS.
- 2) Microscopic Findings of Urine in Various Diseases.
- 3) Describe CSF picture in Pyogenic meningitis.
- 4) Down's syndrome.
- 5) Viral oncogenesis.
- 6) Septic shock
- 7) Enumerate Blood components and mention their uses and storage.
- 8) Granulomatous inflammation.
- 9) Etiopathology and sequelae of Obesity.
- 10) FISH (Fluorescence in situ Hybridization).
